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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,179	01/17/2002	William R. Wheeler	10559-607001/P12891	4487
20985	7590	06/06/2006	EXAMINER	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			THOMPSON, ANNETTE M	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/054,179	<b>Applicant(s)</b> WHEELER ET AL.	
	<b>Examiner</b> A. M. Thompson	<b>Art Unit</b> 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-9,11-15,17-19,21-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,11-15,17-19,21-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09 March 2006 has been entered.
2. Applicants' Amendment to application 10/054,179 has been examined. Claims 1, 7-9, 11, 17-19, 21, 27-29 are amended. Claims 6, 10, 16, 20, 26 and 30 are cancelled. Claims 1-5, 7-9, 11-15, 17-19, 21-25, and 27-29 are pending.
3. Applicants' amendments and remarks have been fully reviewed and considered. The applicable rejections of the prior office action are incorporated herein.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### **Rejection of claims 1-5, 7-9, 11-15, 17-19, 21-25, and 27-29**

5. Claims 1-5, 7-9, 11-15, 17-19, 21-25, and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Watkins et al., U.S. Patent 5,220,512. Watkins

discloses a system for simultaneous, interactive presentation of electronic circuit diagrams and simulation data.

6. Pursuant to claims 1, 9, 11, 19, 21, 29, Watkins discloses a method (c1, c9), article comprising a machine-readable medium (c11, c19), and apparatus (c21, c29) for modeling a logic design (Abstract, Figs. 1, 2; col. 8, ll. 10-48), comprising creating a graphical representation of the logic design (col. 5, ll. 26-44); generating simulation code based on the graphical representation (col. 5, ll. 26-44; col. 5, line 59 to col. 6, line 13); the simulation code comprising executable code (claim 1, lines 18-19, claim 11, lines 36-37); and using the simulation code to test operation of the logic design (see claims 1-5), wherein using the simulation code comprises:

propagating a state through the simulation code (col. 7, ll. 12-47); and determining if there is an error in the logic design based on the propagated state (col. 4, ll. 15-20), wherein determining is performed via executable instructions that operate absent user intervention (col. 12, ll. 16-20).

7. Pursuant to claims 2, 12, and 22, wherein the graphical representation is comprised of functional block diagrams and virtual wires that interconnect the functional block diagrams (Fig. 3; col. 5, ll. 26-43).

8. Pursuant to claims 3, 13, 23 wherein creating comprises retrieving the functional block diagrams from a database and arranging the functional block diagrams and the virtual wires to model the logic design (col. 5, ll. 45-58).

9. Pursuant to claims 4, 14, 24, wherein creating comprises defining the functional block diagrams and the virtual wires to model the logic design (col. 8, ll. 10-35).

10. Pursuant to claims 5, 15, 25, further comprising displaying a menu comprised of different types of functional block diagrams (col. 5, ll. 21-24); receiving an input selecting one of the different types of functional block diagrams; retrieving a selected functional block diagram; and creating the graphical representation of the logic design using the selected functional block diagram (col. 5, ll. 26-40).

11. Pursuant to claims 7, 17, and 27, wherein the state comprises one of a zero, one and an undefined state (Fig. 4, state table).

12. Pursuant to claim 8, 18, and 28, further comprising providing a visual indication if there is an error in the graphical representation of the logic design (col. 6, ll. 2-6; col. 9, ll. 45-57).

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. Responses to this action should be mailed to the appropriate mail stop:

Application/Control Number: 10/054,179  
Art Unit: 2825

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Mail Stop \_\_\_\_\_


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or faxed to:

(571) 273-8300, (for all **OFFICIAL** communications intended for entry)



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